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The roads of decentralisation. The history of rural road construction in Ethiopia

Emmenegger, Rony

Abstract: Roads, in particular rural roads, play a major role in development. In Ethiopia, where the vast majority of the population depends on agricultural production, this is even more so, and the country's road network has become a major policy issue with significant consequences for the population. An extensive network of 114,397 km of different roads has been constructed, maintained, and classified to date. Although community roads account for nearly two-thirds of the country's total road network, virtually no work deals specifically with issues related to their construction. In an attempt to address this lack of information, this paper traces the history of the classified road network and of the governmental sector that has been in charge of its construction, in order to shed light on current policies and practices. While regimes and policies have changed, roads have remained important throughout the history of modern Ethiopia, and the road network has continuously grown, outliving its creators. Based on qualitative research methods, the paper provides useful insights about the role of rural roads in the country's development policy, their relation to the process of decentralisation, and their construction at the local level. As such, the findings of this study contribute to a better understanding of state-led development in a decentralised setting, and shed light on the ways development policies collide with local realities.

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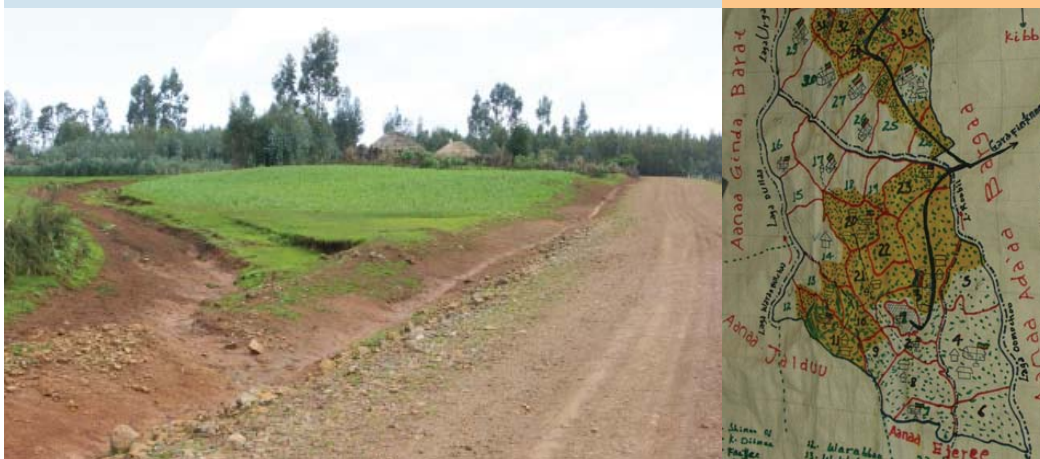
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The Roads of Decentralisation

The History of Rural Road
Construction in Ethiopia

Rony Emmenegger

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Community and regional roads in Meta Robi district in 2009: the reality and the mapping of reality. (Photos by Rony Emmenegger)

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Glossary of Local Terms

<i>Abba warra</i>	Household head, called ‘father of the house’ (Oromiffa)
<i>Dega</i>	Highland (Amharic)
<i>Belg</i>	Rainy season between March and April (Amharic)
<i>Garee</i>	Team (Oromiffa)
<i>Garee misoma</i>	Development team (Oromiffa)
<i>Got</i>	Hamlet (Amharic)
<i>Gott</i>	Hamlet (Oromiffa)
<i>Gudjle limat</i>	Government team (Tigrinya)
<i>Kalu</i>	Traditional Oromo leader (Oromiffa)
<i>Kebele</i>	Sub-district or village (Amharic)
<i>Kolla</i>	Lowlands (Amharic)
<i>Limat budin</i>	Development team (Amharic)
<i>Meher</i>	Rainy season between June and September (Amharic)
<i>Mengist</i>	Government (Amharic)
<i>Mengistawi budin</i>	Government team (Amharic)
<i>Qushet</i>	Village (Tigrinya)
<i>Woina dega</i>	Midland (Amharic)
<i>Woreda</i>	District (Amharic)

Abbreviations

AADT	Annual Average Daily Traffic
ADF	African Development Fund
ADLI	Agricultural Development Led Industrialisation
BPR	Business Process Reengineering
DDP	District Development Plan
DLDP	Distinct-Level Decentralisation Programme
DS	Design Standards
EC	Ethiopian Calendar ¹
EPMGHA	Ethiopian Provisional Military Government Highway Authority
EPRDF	Ethiopian People's Revolutionary Democratic Front
ERA	Ethiopian Roads Authority
ERTTP	Ethiopian Rural Travel and Transport (sub-) Programme
ETB	Ethiopian Birr ²
ETCA	Ethiopian Transport Construction Authority
FAO	Food and Agriculture Organisation
FDRE	Federal Democratic Republic of Ethiopia
GDP	Gross Domestic Product
HP	Highway Programme
HRW	Human Rights Watch
IBRD	International Bank for Reconstruction and Development or World Bank
IHA	Imperial Highway Authority
ILO	International Labor Organisation
MKC-RDA	Meserete Kristos Church Relief and Development Association
ORA	Oromia Roads Authority
ORCE	Oromia Road Construction Enterprise
ORRA	Oromia Rural Roads Authority
ORSG	Oromia Regional State Government
OWWDSE	Oromia Water Works Design and Supervision Enterprise
PASDEP	Plan for Accelerated Sustainable Development to End Poverty
PRS	Poverty Reduction Strategy
PSNP	Productive Safety Net Programme
RR	Rural Road
RRA	Rural Roads Authorities
RRD	Rural Road Department
RRTF	Rural Road Task Force
RSDP	Road Sector Development Programme
SDPRP	Sustainable Development and Poverty Reduction Programme
SP	Sector Programme
URAP	Universal Rural Access Programme
UN	United Nations
WB	World Bank
WFP	World Food Programme
WRRO	Woreda Rural Road Offices

¹ e.g. 2000EC = 2007/08.

² e.g. 1ETB=0.08USD, 31 January 2010.

1 Introduction

Historically, the existence of ‘roads’ or tracks in Ethiopia was simply the result of constant flows of passengers, animals or erosion rather than of planned and intended construction activities (Ayele Tarekegn 1987:1). Only with the creation of the Imperial Highway Authority (IHA) in 1951 was a governmental body entrusted with road construction. Since then, a domestic road sector has emerged through the interplay of governmental and non-governmental institutions as well as significant foreign support in technical, professional, institutional and financial terms. The history of the road sector has further been characterised by an increasing professionalisation with respect to capacity, skills, construction techniques and approaches. After the takeover of the incumbent government led by the Ethiopian People’s Revolutionary Democratic Front (EPRDF), the decentralisation policy created a new context in which the road sector developed.

To this day, rural roads have been a major policy issue with significant consequences for the country and its population. This working paper traces the history of state-led rural road construction in Ethiopia in order to understand how they are constructed today. It provides insights into the role of rural roads in the country’s development policy, their relation to the process of decentralisation and their construction at the local level. As such, the findings contribute to a better understanding of state-led development in a decentralised setting and of how development policies collide with local realities.

An extensive network of 114,397 km of different roads has been constructed, maintained and classified to date.¹ While regimes and policies changed, roads have remained important, the road network has continuously grown and has outlived its creators. Moreover, the EPRDF government emphasises the importance of roads for development and has defined road infrastructure as one of the main pillars of its development policy as formulated in the Agricultural Development Led Industrialisation (ADLI), the Poverty Reduction Strategy (PRS) (FAO/ILO/WFP 2008; UN 2007b), as well as the Road Sector Development Programme (RSDP). In Ethiopia’s development policy, roads – particularly rural roads – are seen as “...one of the decisive factors that highly contribute to social and economic development” (ORSG 2009), especially in a country where the majority of people live and depend on agriculture.

Today, the road sector is organised in line with the decentralisation policy of the EPRDF government. Rural road construction takes place in a decentralised setting in which federal, regional and district governments hold the responsibility for maintaining and expanding the road network within their territories. After the fall of the Derg² regime in 1991, an ethnic-based federalism³ and a five-tiered administrative structure was estab-

1 The total length of the current Ethiopian road network is calculated on the basis of the Road Sector Development Programme ‘Eleven Years Later’ performance report. The total length is an the addition of 20,429km federal roads, 23,930 regional roads and 70,038km community roads (ERA 2008b:25-27).

2 Derg means ‘committee’ or ‘council’ in amharic and refers to the Leninist-Marxist military government, 1974-91 (Donham 1999:19)..

3 Ethnic federalism in Ethiopia is constituted of nine ethnic regional states, two multi-ethnic cities (Addis Ababa and Dire Dawa), 66 administrative zones, 550 *woreda* districts and six special districts. Six regional states are defined on the basis of their dominant ethnic group and ethnic language (Afar, Amhara, Harari, Oromia, Somalia, Tigray), while other three multi-ethnic states use Amharic as the working language (Benishangul-Gumuz, Gambella, Southern Nations Nationalities and People) (Keller 2005:106-108; Abbink 2006:393-394).

lished, reaching from the federal and regional government, down to the zonal, district (*woreda*) and sub-district (*kebele*) levels. Article 39 of the Constitution of the Federal Democratic Republic of Ethiopia (FDRE) defines the power balance between the federal and regional level, and guarantees “every Nation, Nationality and People in Ethiopia ... [the] unconditional right to self-determination...”. In line with the new political set-up, responsibility for administering different roads became decentralised and the previously classified road network was categorised into federal and regional roads (ERA 2007:7; 2008b:24). While trunk and link roads fell under the administration of the federal Ethiopian Roads Authority (ERA) (WB 2001), regional Rural Road Authorities (RRA) in five regions were entrusted with the responsibility for rural roads in their newly established regional states (ERA 2008b:24). Since 2001, decentralisation in Ethiopia has entered a second phase⁴ that further transferred the responsibility for rural roads to the district level (Tegegne/Kassahun 2007:10; Dessalegn Rahmato 2008b:244). In this phase, the authority “...to examine and approve all plans, programmes and initiatives concerning economic development, social services, public administration and natural resource management” (Dessalegn Rahmato 2008b:246) was transferred to the *woreda* level.⁵ As a result, *Woreda* Rural Road Offices (WRRO) were established at district level as executive sector offices responsible for community roads (Tegegne/Kassahun 2007:34).

This working paper aims at shedding light on the historical roots of state-led rural road construction, which was an important development issue until recently in Ethiopia. Kumera Kanea (2007:118) concludes that in the rural road sector, it is “...not possible to make comparisons of the state of affairs before and after decentralisation owing to lack of data”. Although these community roads account for nearly two-thirds of the country’s total road network, virtually no work deals specifically with their construction. In an attempt to address the lack of information about community roads, this paper traces the historical roots of the classified road network and the governmental sector that has been in charge of its construction. The focus is on government institutions with the exclusive responsibility for road construction, while rural road construction activities of others – for example those undertaken by the Ministry of Agriculture and Rural Development or framed under the Productive Safety Net Programme (PSNP) – are not considered. In addition, non-governmental and foreign actors have also played a role in the construction of roads in Ethiopia (cf. ETCA 1986:3) but are not objects of investigation in this paper.

Due to the scarce availability of academic literature on the road sector in Ethiopia, this paper is mainly based on governmental and non-governmental documents. Although

4 Formulated in the District-Level Decentralization Programme (DLDP).

5 Within the new constitutional arrangement, the *woreda* and the *kebele* became the lowest unit of the government at the local level. However, authority has so far not been transferred to the *kebele* administration, which nevertheless works at the community level in rural areas (Tegegne/Kassahun 2007:12,34). Although the *kebele* has a similar authority structure as the *woreda*, “...the *kebele* enjoys much less autonomy and decision making power than the *woreda*, to which it is subordinate” (Dessalegn Rahmato 2008b:247). Thus, the *kebele* administration holds the responsibility of administering the public, controlling and maintaining peace and security, collecting taxes, providing services and food aid as well as mobilizing the people for community participation (Bevan et al. 2006:63). For this purpose, the *kebele* executive cabinet is responsible and located at the *kebele* field office (Kumera Kanea 2006). It consists of the chief and deputy administrator, the *kebele* manager, the head of peace affairs and several sector extension agents as the health agent, the school agent, the agricultural development agent (Pankhurst 2008:11). The EPRDF government extended the *kebele* on the grounds of the collapsed peasant associations of the Derg, and granted similar judicial powers as its predecessors. While its leaders were replaced, the structure remained the same (Pausewang 2002:6,98).

these sources shed light on what have recently become federal and regional roads, they fail to describe rural road construction at community level. In order to bridge this gap, I conducted field research on rural road construction in Meta Robi *woreda*, Oromia⁶ region, during the *meher* rainy season in 2009. Based on data collection in Addis Ababa, this rural district was selected because of two particular state-led activities of rural road construction: (1) an ongoing regional road construction project of the Oromia Roads Authority⁷ (ORA) and (2) continuous community road construction activities of the WRRO. In total, 58 un- and semi-structured interviews as well as 23 group discussions were conducted with actors involved or related to road construction. This study is entirely based on qualitative research methods, from data collection to data analysis.

This working paper mainly takes a historical perspective and brings together information about the emerging road sector in Ethiopia, the road policies formulated, as well as the road network constructed. In the following chapter (Chapter 2) different road classification systems are presented in order to clarify the basic terminology for understanding roads in Ethiopia. In Chapter 3, the history of the road network is traced with a particular focus on different motivations for road construction. On this basis, the role of roads in the development and sector policy under the EPRDF is presented. In Chapter 4, attention is paid to recent decentralised institutional settings and their historical emergence in connection with the issue of rural roads. In Chapter 5, two important modes of road construction – contracting and the labour-based approach – are illustrated and provide the necessary background for understanding the two empirical cases of rural road construction in Meta Robi in the next chapter. After a brief introduction to the study area, this chapter investigates a regional road constructed by a contractor and using a labour-based approach. This chapter further explores community road construction activities and the participation of the community in these activities through so-called teams (*garee*⁸) or development teams (*garee misoma*) at the household level. The final chapter advances a number of concluding remarks on rural road construction and its historical roots.

6 Oromia is by far the largest region within Ethiopia, both in terms of land area and population size. “The Oromo Region is mainly populated by the numerous Oromo ethnic group, with some minority groups inbetween...” (Tronvoll/Aadland 1995:36).

7 Semi-autonomous Regional Roads Authorities have also been established in Tigray, Amhara, Gambela, Benisangul-Gumuz and Southern Nations Nationalities and People region, while rural roads are under administration of the Regional Bureau of Rural Development in Afar and Somali region (ERA 2008b:24-25).

8 The Oromia regional government established *gott* (hamlet) and *garee* (team) at sub-*kebele* level roughly in 2004 as an association of households. The *gott* contains between 60 and 90 households; the *garee* about 30 (HRW 2005:30). A sub-*kebele* “...act as a channel of communication and mobilization for a given number of households...” (Dessalegn Rahmato 2008b:331). In other regions, similar institutions have already been introduced before: the *garee*, or *garee misoma* (development team) finds its equivalent in the *limat budin* in Amhara and in the *gudjle limat* in Tigray. The roots of the *limat budin* can be traced back to the Derg regime, when it was called *mengistawi budin* (government team) (cf. Bevan et al. 2006; Bevan/Pankhurst 2007; Dessalegn Rahmato 2008b; Kumera Kanea 2006; Pankhurst 2008:12; Segers et al. 2008; Vaughan/Tronvoll 2003). However, while these sub-*kebeles* are reported in relation to different development activities (cf. Pankhurst 2002; Waga et al. 2007), a growing number of studies have also taken account of the sub-*kebele* especially after and in connection to the 2005 elections (cf. Aalen/Tronvoll 2009; HRW 2005; Lefort 2007; ICG 2009).

2 Road Classification in Ethiopia

Since 1951, the road network in Ethiopia has become increasingly differentiated, which is expressed by the ways in which it has been classified. In general, three different systems of classification can be distinguished: the technical, functional and political classification (see table 1):

Table 1: Road classification. (Source: own representation based on ILO 2008:8)

Functional classification					Technical classification				Political classification
					DS	Traffic (ADT)	Width (m)	Surface Type	Ownership
Feeder	Collector	Main Access	Link	Trunk	DS-1	10,000-15,000	2 x 7.3	Asphalt	ERA (Federal Roads)
					DS-2	5,000-10,000	7.3		
					DS-3	1,000-5,000	7.0		
					DS-4	200-1,000	6.7		
					DS-5	100-200	7.0		
					DS-6	50-100	6.0	Gravel	RRAs (Regional Roads)
					DS-7	30-75	4.0		
					DS-8	25-50	4.0		
					DS-9	0-25	4.0	Earth	Woreda Rural Road Office (Community Roads)
					DS-10	0-15	3.3		

First, the **technical classification** categorises roads on the basis of their technical standards. Rather simple classifications are made according to different surface types, widths or the road's traffic carrying capacity (Annual Average Daily Traffic (AADT) (ERA 2002b:1). A more detailed technical classification is based on the application of the ten Design Standards (DS), which have recently been defined by the Ethiopian Roads Authority (ERA). They clarify “the principal geometric features ...[as] the road cross-section and horizontal and vertical alignment”⁹. Despite the strictly technical formulation of the design standards, they meet a variety of objectives for road users (e.g. safety or traffic volume), for the implementation (e.g. economic and financial considerations, construction technologies) as well as for the particular location of the road (e.g. topology, land use, environment) (ERA 2002a:1).

Second, the **functional classification** categorises roads according to their significance for the mobility of people and goods. In particular, trunk, link, main access, collec-

⁹ In regard to rural roads, Design Standards removed the Rural Road (RR) standards for the classification of rural roads. For example, DS-6 and DS-7 are gravel roads and “...equate approximately to standard ‘RR50’ and ‘RR30’ in the previous system used in Ethiopia, but with some differences” (ILO 2008:7). The previous system was mainly formulated for the classification of rural roads. While the identifiers RR-10, -30 and -50 generally refer to the carrying capacity of the road in terms of traffic entities per day, it also implies technical variations necessary for the achievement of the carrying capacity required (cf. ETCA 1986:46-49).

tor and feeder roads are distinguished (ERA 2002a:3). The terminology used for this classification implicitly indicates the connection to a policy focus on socio-economic development. Third, the **political classification** categorises roads according to the levels of the decentralised political system responsible for the administration of roads. Consequently, the recently existing road network can be classified into 20,429 km of federal roads, 23,930 km regional roads and 70,038 km community roads (ERA 2008b:25-27). In addition, a certain **politico-functionalist classification** can be identified emphasising the relation or connection between the decentralised levels. In this context the road network is categorised into *kebele-kebele*, *kebele-woreda*, *woreda-woreda* roads etc. (cf. Fortune 2010).

3 Road Infrastructure in Ethiopia

Three perspectives can explain why road construction has been a domain of the state in Ethiopia. First, from an economic perspective, road infrastructure is a classic example of a public good that is characterised by non-excludability. As a consequence, the private sector has no interest in providing roads (Becker/Demissie 2006:12). Hence, road construction has been a domain of the Ethiopian state throughout its history. Second, from a political perspective, road infrastructure and the accessibility of peripheral rural areas are of crucial importance for the state's "...monopoly on the legitimate use of physical force in the territory it is said to control" (Herbst 2000:21). From this point of view, it is argued that the construction of roads has played a significant role in the consolidation of the Ethiopian state since its very beginning (Clapham 2002:11). Third, from a development perspective, road infrastructure constitutes a precondition and decisive factor for development and has therefore to be provided by the state.

In fact, road infrastructure in Ethiopia has had a great strategic, political, economic and social significance. The literature and documents on past road infrastructure often draw a clear line between different Emperors' and regimes' motivations to construct roads. However, the significance of roads can hardly be reduced to one single aspect for the era concerned, but indicates the discursive justification of its construction for the regime concerned.

3.1 A history of the road network and related policy

The history of the Ethiopian road network goes back to the very beginning of the Ethiopian state. This origin can be related to the reign of Emperor Tewodros (1855-68), who succeeded in fragmenting the traditionally feudal system and in centralising political power (Keller 2005:126). Although the establishment of a professional and disciplined state army is seen today as Tewodros' main achievement (Keller 2005:90; Bahru Zewde 1991:32), he was also the pioneer of road construction in Ethiopia. Associated with his intention to expand the (northern highland) empire, he recognised the strategic and political importance of roads. Consequently, a relatively small-scale road network was constructed and enabled the Emperor to rapidly move his troops to the centers of rebellion in the conquered areas (Ayele Tarekegn 1987:1).

In the late 19th century, the city of Addis Ababa, founded in 1887 (Gascon 1997:363), replaced the northern highland as the geographical center of political power. Clapham (2002:11) uses a center-periphery concept and points to the importance of overcoming physical distance for communication within the empire. He explains that the peripheral position of regions and communities, their political and economic incorporation as well as "...their degree of association with the legitimising myths of nationhood" could be approximately defined by their physical distance from the capital. However, Tewodros' successors also paid great attention to road construction, especially Menelik II (1889-1913) and his province governors. During the reign of Haile Selassie (1930-36), the capital-centered (Addis Ababa) road network was intensified and modernised "...for economic and political reasons..." (Ayele Tarekegn 1987:3). On the one

hand, the emerging motor traffic since the advent of the motorcar in Ethiopia in 1907 had increased the demand for roads within the capital. On the other hand, the global economic crises and world depression in 1929-1933 forced the reign to improve the capital's road communication with the provinces (Ayele Tarekegn 1987:1-3). However, despite the intention to expand the country's road network, it remained poorly developed until the Italian occupation (Keller 1991:96-97).

During the Italian occupation (1936-41), considerable efforts were undertaken with respect to road infrastructure (Keller 1991:97), and the Ethiopian road network expanded from about 1,040 km in 1930 to about 6,400 km in 1941 (Asnake Tadesse 2006:24). Initially, road construction started as a preparation for war in the early Italo-Ethiopian conflict. While these initial roads had been constructed where the Italian's penetrated the territory, i.e. Eritrea, the activities continued inside Ethiopia after the invasion in 1936. The road making activities followed in the footsteps of the invading forces so that paved roads would allow easier and swifter passage of troops and supplies. From a strategic point of view, the priority was given to roads linking major towns, but also to those linking the 'colony' with the outside world. Attention was paid to quantity rather than quality, and several new roads were constructed and pre-war roads maintained, upgraded or elongated (Ayele Tarekegn 1987:3-11).

Several political and economic arguments can be found for the improvement of the transport system of the Italian colony. Most obviously, the strategic and military importance of roads led to initial construction and maintenance (Ayele Tarekegn 1987:6,14). The existence of a road network later helped the Italians to "consolidate its rule over Ethiopia, initiate development projects and pacify unstable areas" (Ofcansky/Berry 2004:203). Or, in other words, to effectively administer, economically exploit and suppress the resistance of Ethiopian patriots. In addition to the importance of roads for administering the colony, the link to the outside world also led to the expansion of the road network. As an example, Italy aimed at connecting the colony with the British Somali Port Berbera in order to become less dependent on the French-run Djibouti Railway (Ayele Tarekegn 1987:4-6). On the one hand, road construction efforts were a clear sign of the Italians' attempt "...to transform ... Ethiopia into a self-sufficient export economy linked to the world market" (Keller 1991:97). On the other hand, given the deterioration of Franco-Italian relations, it was an obvious expression of the broader geopolitical patterns. With the Italian's involvement in World War II, road construction in Ethiopia came to a sudden end. In 1941, powerful attacks from the Anglo-Ethiopian liberation movement forced the Italians to flee and to strategically destroy parts of the road network established so far (Ayele Tarekegn 1987:6,13).

After the liberation of Addis Ababa, Emperor Haile Selassie re-entered the capital on 5 May 1941 (Bahru Zewde 1991:176). While road construction and maintenance activities stagnated in the following years (Ofcansky/Berry 2004:203), they regained attention in the early 1950s. Haile Selassie had sufficiently consolidated the administrative authority of the state and could now turn his attention to more economic matters (Keller 1991:97). He recognised the importance of an existing road system for the economic needs of the population and the government (ERA 2004:1). Accordingly, a Highway Programme (HP) was formulated in order to stimulate the expansion of mar-

ket activities throughout the country. In particular, the programme aimed at creating transport infrastructure, to attract foreign capital investors or to open up remote but potential and economically rich areas of agriculture, mineral resources and tourism (Keller 1991:97). Attention was paid to connecting provincial capitals, other important towns, as well as the connection of Addis Ababa with the outside world through the port of Assab.

In this sense, the first Highway Programme (HP I 1951-57) focused on the inherited but deteriorated Italian road network. Several existing roads were rebuilt, reconstructed and maintained. Although the road network had initially mainly fulfilled military purposes, the roads' economic usefulness was not reduced. With the second Highway Programme (HP II 1957-65) the focus shifted toward the construction of new roads (Ayele Tarekegn 1987:14,26,32). In the following years, two further Highway Programmes were formulated and increasingly opened up previously inaccessible regions of the country (Keller 1991:98). Specifically, the classified road network increased from the inherited 6,400 km in 1951, to a total of 9,260 km in 1974 (Asnake Tadesse 2006:24).

In 1974, the Derg assumed power and continued with the construction of new roads on a larger scale than ever before. While the new regime initially followed the Highway Programme of its predecessor, it shifted its attention to the construction of the previously neglected rural roads (Ayele Tarekegn 1987:61-64). The Derg identified the lack of access to rural areas as a serious bottleneck for agricultural development (ETCA 1986:4). The rural infrastructure, particularly low-cost and low-standard roads, were given increasing attention. On the one hand, rural infrastructure was seen as a means for the achievement of socio-economic development. On the other hand, it was considered as a precondition for the expansion of further socio-economic infrastructure. The economic role of rural roads for the country and its population was emphasised with respect to market access in general, and the possibility for the rural population to bring their products to the market in particular. Concerning social development, the importance of rural roads was justified by highlighting their ability to help and rehabilitate drought-affected people.

As a consequence of this increasing focus on rural road, the first Sector Programme (SP I 1977/78-1981/82) was formulated and replaced the Highway Programmes. The sector Programme expressed the government's intention to construct a "...vast network of systematised low-cost and low-standard roads..." and to unite the existing main highways with the projected rural roads (Ayele Tarekegn 1987:65). From a political perspective, the value attached to rural roads by the Derg can be interpreted as a means for raising political consciousness in the countryside (Ayele Tarekegn 1987:61-67) or a way to enforce the regime's intrusion into the rural areas (Dessalegn Rahmato 2008b:329). However, until 1990, the Derg had increased the classified road network to 19,020 km (ERA 2008b).

3.2 The road policy of the EPRDF

With the arrival to power of the EPRDF in 1991, a new policy was formulated in which roads again played a major role (see table 2). The high level of deterioration of

the country's road infrastructure and the lack of accessibility was again identified as one of the main challenges for the government's effort to achieve development (ERA 2003). As a consequence, the provision of road infrastructure was increasingly emphasised in the policies formulated (ERA 2007:11). Roads are acknowledged in the ADLI as well as in the Sustainable Development and Poverty Reduction Programme (SDPRP) and its successor, the Plan for Accelerated Sustainable Development to End Poverty (PASDEP) programme. In accordance with these overall development policies, the RSDP as well as the Ethiopian Rural Travel and Transport (sub-) Programme (ERTTP) were formulated as the particular road sector policy.

Table 2: The Road Sector Development Programme since 1951.

	Programme	Justification	Network
Imperial Regime	Highway Programme (HP I-IV)	Economic development	a) Rebuilding of the inherited Italian road network b) Expansion to inaccessible regions
DERG (1974-91)	Sector Programme (SP)	Socio-economic development	a) Improvement of the networks connectivity b) Expansion to inaccessible rural area
EPRDF (1991-)	Road Sector Development Programme (RSDP I)	Socio-economic development	a) Coordination on administration framework b) Restoration of the road network c) Construction of new roads (federal roads)
	Road Sector Development Programme (RSDP II)	Socio-economic development	a) Continuation with RSDP I b) Additional focus to rural roads
	Ethiopian Road Transport and Travel Programme (ERTTP)	Socio-economic development	a) Construction of transport and travel infrastructure in rural areas
	Road Sector Development Programme (RSDP III)	Socio-economic development	a) Continuation with RSDP I/II

In terms of development policy, the Ethiopian government is guided by the ADLI and the SDPRP/PASDEP, through which the issue of socio-economic development is acknowledged. The ADLI, formulated as a long-term strategy in 1993 (Tewodaj et al. 2008:8), acknowledges that agriculture is the engine of national economic growth. It is argued that Ethiopia and its population is highly dependent on agriculture, and that development and growth can only be achieved by the promotion of agriculture. It is therefore assumed that the improvement of smallholder agriculture particularly affects the income of rural households (and therefore poverty), but also brings general economic growth (Dessalegn Rahmato 2008a:138). In fact, the majority of the country's population (80%) lives in rural areas and depends on a subsistence economy (ESA 2004 in: Becker/Demissie 2006:9). As a result, Ethiopia's economy is highly dependent on agriculture, which accounts for around 50% of its GDP (ERA 2007:4). As a complement to the ADLI strategy, the Ethiopian government follows a PRS, which

was formulated after 2000 in two five-year plans as the SDPRP (1993EC) and later as the PASDEP (1998EC) (Dessalegn Rahmato 2008a:131-133). These strategies aim to tackle the widespread and multifaceted poverty that plagues Ethiopia. The ADLI strategy and the SDPRP/PASDEP bring agricultural productivity and food security into consideration and propose a variety of policy measures to achieve socio-economic development.¹⁰ These policies particularly emphasise the importance of road infrastructure and the accessibility of rural areas. It is generally assumed that road infrastructure supports and catalyzes the achievement of social and economic growth and the meeting of poverty reduction objectives (ERA 2007:7).

For the road sector, the Ethiopian government has worked out a ten-year RSDP in 1997. The RSDP was formulated in consistency with overall development policies, and it is the government's strategy for the achievement of its policy objectives in the road sector. The RSDP I, the first phase, which was launched in 1997, was formulated as a coordinating framework for interventions and reforms in order to improve the road network in terms of quality and size. The RSDP I focused on the restoration of the road network by the rehabilitation, upgrading and maintenance of main roads, but also by the construction of new roads. Besides the focus on physical infrastructure, the programme also aimed to strengthen the road sector's administration, management and technical capacity through policy and institutional reforms. RSDP II – the second phase launched in 2002 – was formulated in order to consolidate the RSDP I's achievements and to further increase the network's connectivity (ERA 2003; 2007:11). In contrast to the first RSDP's main focus on federal roads, the RDSP II considers rural roads, even low-level rural roads at the community level (WB 2001). The RSDP entered its third phase in 2007 in order to continue with construction activities at different levels as well as with the policy and institutional reform (ERA 2008b).

In line with the new focus on rural roads since the RSDP II, the ERTTP was formulated in 2002 concentrating on previously inaccessible or disconnected rural areas. In consistency with ADLI and PASDEP, the ERTTP aims to increase access to, and mobility within, rural areas and to reduce the rural population's travel and transport burden (ERA 2003; 2008b:26). As "...an integrated rural development initiative..." (ERA 2009a), the ERTTP tackles the problem of rural access as a multi-sectoral issue and covers transport as well as non-transport interventions. The programme includes three main components (ERA 2007:21; 2008a:4-5; WB 2001:34): First, the construction and expansion of the rural infrastructure at the community level (low cost roads, footpaths, trails etc.). Second, the provision and increase of intermediate means of transport and transport services. Third, the expansion and provision of socio-economic facilities (water points, schools, grinding mills etc.). However, construction activities

10 The Agricultural Development Led Industrialization adopts a six-pillar strategy and puts attention to; (1) agricultural extension and research, (2) design and operationalization of growth corridors, (3) agricultural export promotion, (4) Food Security Programme, (5) Productive Safety Net Programme, (6) Voluntary Resettlement Programme (UN 2007b). In addition, the Sustainable Development and Poverty Reduction Programme draws mainly on a four-pillar strategy; (1) continuation of Agricultural Development Led Industrialization, (2) civil service justice system reform, (3) capacity building, and (4) governance, decentralization and empowerment (Graeme 2004:5). The Plan for Accelerated Sustainable Development to End Poverty follows an eight-pillar strategy; (1) building all-inclusive implementation capacity, (2) a massive push of accelerate growth, (3) creating the balance between economic development and population growth, (4) unleashing the potentials of Ethiopia's women, (5) strengthening the infrastructure backbone of the country, (6) strengthening human resource development, (7) managing risk and volatility, and (8) creating employment opportunities (UN 2007a).

have so far only been implemented in eight pilot *woredas*, while in about 100 other *woredas*, the programme is currently in a planning and study stage (ERA 2009b). Despite the programme's importance within the national road and development policy, its measureable impact remains limited in terms of physically constructed rural roads. The focus on rural roads has been recently confirmed by the ongoing elaboration of the Universal Rural Access Programme (URAP). While the ERTTP planned to work at the *woreda* level, the newly elaborated programme should provide road access to all *kebeles* in Ethiopia. In particular, the URAP aims at connecting all 18,000 *kebeles* in Ethiopia and therefore follows a certain politico-functionalist classification of roads (see Chapter 2). The responsibility for the implementation of the URAP has recently been handed to the ERA, which has been instructed to incorporate the programme into its five-year plan (Fortune 2009a; 2010).

4 The Road Sector in Ethiopia

4.1 A history of state-led road construction

The establishment of the IHA in 1951 marked the institutional beginning of state-led road construction in Ethiopia. The IHA was the first authority with exclusive¹¹ responsibility for roads in Ethiopia. It was established by an imperial proclamation (No 115/1951) as an autonomous governmental agency under the Ministry of Public Works and Communication. With the founding proclamation, the IHA was not only assigned the responsibility to plan, design, construct and maintain the Ethiopian road network, but also endowed with the necessary power to fulfill this duty. The IHA was given several rights: First, the right to enter agreements with other public authorities and (domestic and foreign) private firms. Second, the right to expropriate privately owned lands for public use with compensation. And third, the right to import any supply, equipment and material duty-free. Further, the creation of the IHA was highly influenced by the World Bank (IBRD) and the United States Bureau of Public Roads in operational as well as organisational terms (Ayele Tarekegn 1987:15-22; ERA 2004:1).

In the following years, the IHA initiated several Highway Programmes to improve and extend the Ethiopian road network. Foreign construction firms were contracted to carry out the construction and maintenance activities, while the IHA's own construction capacity was relatively low. The authority lacked internal operation, organisation and coordination capacity, qualified and skilled staff as well as financial means. As a consequence, the IHA remained highly dependent on foreign construction firms, skilled foreign specialists as well as financial donor support (Ayele Tarekegn 1987:26-49).

After 1974, the IHA was taken over by the new regime and became the Ethiopian Provisional Military Government Highway Authority (EPMGHA). The EPMGHA generally continued with the IHA's Highway Programmes and the road project under full use of contractors. Despite continuity, two major changes – already initiated by the IHA – paved the way for a higher construction capacity of the EPMGHA. First, the IHA had initiated informal (on-the-job training mainly by American specialists) and formal (in the IHA's trainings department) trainings. On this basis, the EPMGH increasingly managed to form a sufficient number of skilled and experienced workers and strengthened its direct labourforce capacity. Second, the IHA had managed to develop sufficient and capable local highway contractors by assistance of the IBRD and the Ethiopian Development Bank since 1972. These local contractors were nationalised in 1974/75 and enabled the EPMGHA to strengthen its construction capacity (Ayele Tarekegn 1987:30-31,55-60).

The Derg's increasing focus on rural roads released an impulse of institutional changes in post-1974 (see figure 1). The sixth Highway Programme (HP VI 1982/83-1988/89)

11 The Public Works Department, later transformed into the Ministry of Public Works, had already been involved in the rehabilitation and maintenance of roads in the previous years, but did not hold the exclusive authority for road construction (Ayele Tarekegn 1987:3).

introduced the previously neglected rural roads and issued a claim for institutional change (Ayele Tarekegn 1987:64-65). This claim encompassed the creation of “...a single organisation for the administration, construction and maintenance of rural roads and for setting appropriate standards for the design and the execution of work” (ETCA 1986:4-5). On this basis, a Rural Road Task Force (RRTF) was created outside the government structure in the early 1970’s. The RRTF formulated a 10-year rural road construction programme for the 14 administrative provinces. Design standards were proposed for different classes of rural roads, and socio-economic criteria were developed in order to rank and prioritise particular roads according to their importance (ETCA 1986:4-5). These developments marked not only the beginning of the systematised construction of rural road within the classified road network, but also its coordination on a national scale (Ayele Tarekegn 1987:64-66).

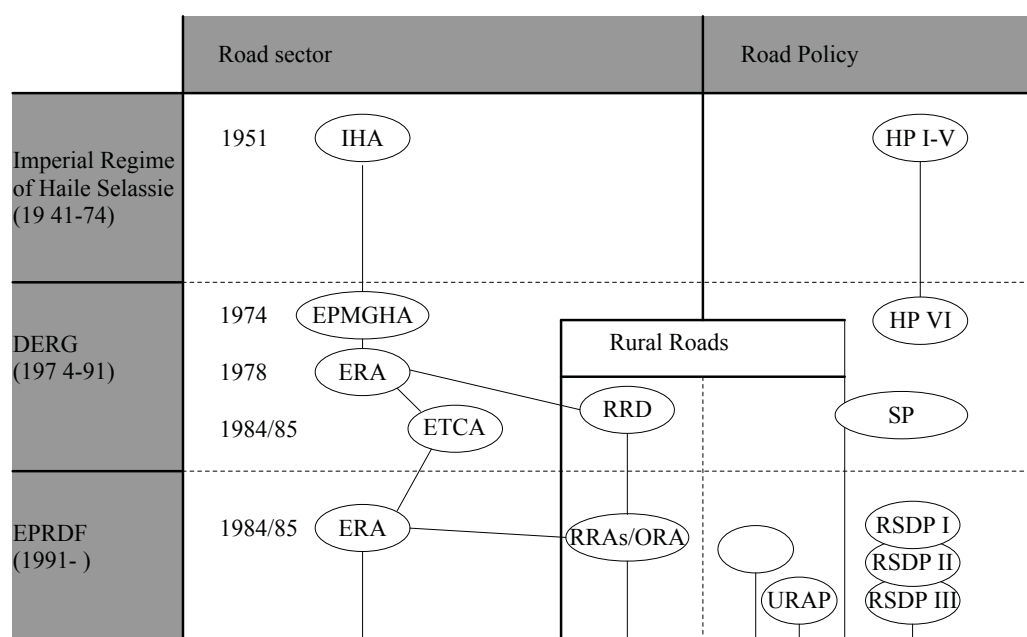


Figure 1: The emergence of rural roads in the history of the road sector and the road policy in Ethiopia. (Source: own design).

The RRTF paved the way for the institutionalisation of rural roads as well as their affiliation within the classified road network. In 1978, the EPMGHA was transformed into the ERA by government proclamation in 1978. Structurally under the Ministry of Transport and Communication, the newly established independent authority was responsible for the construction, maintenance and rehabilitation of highways as well as of rural roads. Within the ERA, the importance of rural roads was acknowledged by the establishment of the Rural Roads Department (RRD) at the same structural level as the Highway Department (Ayele Tarekegn 1987:64-65; ETCA 1986:50). The RRD held the responsibility to plan, construct and maintain low-cost and low-standard provincial rural roads, or, in other words, “...to develop rural roads outside the main system and to extend feeder roads within the main system” (Ofcansky/Berry 2004:203). By the establishment of the RRD, rural roads were affiliated with the classified road network and increasing demand for the coordination between these projected rural roads and the existing highway network. While the Highway Programmes had been operating on

a project basis, the newly formulated Sector Program worked on periodical basis, aiming to connect highways and rural roads (Ayele Tarekegn 1987:66).

In the 1980's, rural roads remained an important policy concern and were part of the debate about responsibilities and an appropriate institutional environment. It was claimed that the RRD's responsibility for the construction and maintenance of rural roads should structurally be decentralised at least to the sub-provinces level. Although the establishment of regional offices in several administrative provinces could be seen as a tendency toward decentralisation, the responsibility for rural roads remained structurally centered at the national level (ETCA 1986:4-5). Nevertheless, the various branches of the road and transport sector became even more centralised under the Ethiopian Transport Construction Authority (ETCA). The government established the ETCA¹² as an autonomous agency under the Ministry of Transport and Communication, later (1981/82) under the Ministry of Construction. Although the ERA's construction capacity had been recognised, it was transformed and reorganised under the newly established ETCA. The ETCA overtook the overall responsibility for the construction and maintenance of highways and rural roads, as well as of municipal roads, aerodromes, railways and ports (Ayele Tarekegn 1987:69). The ETCA held the responsibility for the entire classified road network until 1994 (ERA 2009a:18).

4.2 State-led road construction under the EPRDF

When the Derg regime was overthrown in 1991, major political reforms took place and a federal system was initiated. In line with the new political set-up, responsibility for administering different roads became decentralised and the previously classified road network was categorised into federal and regional roads (see map 1) (ERA 2007:7; 2008b:24). While trunk and link roads fell under the administration of the federal ERA (WB 2001), responsibility for rural roads was transferred to the newly established regional Rural Roads Authorities (RRAs) (ERA 2008b:24). A more detailed and clarified separation of responsibilities between the ERA and the RRAs was later formulated in the RSDP (ERA 2007:2).

The ERA was reestablished at the federal level under the direct supervision of the Ministry of Works and Urban Development (Fortune 2009b) by government proclamation No. 80/1997. In contrast to its predecessor – the ETCA – the ERA became exclusively responsible for road infrastructure (ADF 2005:8). As a consequence of the priority given to road infrastructure in the EPRDF's policy, the road sector in general and the ERA in particular were recently strengthened compared to other government institutions (Becker/Demissie 2006:23). As a public sector entity, the ERA's general mandate is “to regulate, plan and manage the federal road network of Ethiopia, which includes construction, maintenance, upgrading and rehabilitation so that it will achieve the overall objective of economic development, growth and poverty reduction” (ERA 2004:5). The ERA, as the highest governmental body in the road sector holds three

¹² The founding year of the Ethiopian Transport Construction Authority could not be reconstructed through the documents available for this paper.

main responsibilities. First, the ERA is responsible for the improvement and expansion of the road network at the federal scale (ERA 2004:4, Becker/Demissie 2006:23). This encompasses the planning, construction and maintenance of all trunk roads as well as linking roads. While trunk roads refer to those “...extending from Addis Ababa to connect major urban and regional centers...” (ILO 2009:2), linking roads include mainly roads, which connect or lead to two or more region. Second, the ERA is responsible for the overall sector planning (WB 2001; ERA 2009a:17) of the Ethiopian road network as the formulation of the RSDP and the ERTTP (ERA 2007:2). Its third responsibility is to support the regions’ RRAs in professional as well as institutional regard. As indicated above, the ERA is also planning the “...overall rural road network and programming” (ERA 2008b:25) and collaborates with the RRAs. In operational terms, the ERA gives technical advices and assistance, and also provides and coordinates different training activities (ERA 2009a:17; ERA 2008b:25).



Figure 2: The federal and regional road network in Ethiopia. (Source: own representation based on ERA 2006).

With the takeover of the EPRDF, the responsibility of administering rural roads was devolved to the newly established regions (ILO 2009:2). Thus, the regions became “...responsible for the construction and management of the rural roads in their respective area...” (ERA 2009a:18; ILO 2009:3) and basically equipped by ERA’s property and staff.¹³ In the particular case of Oromia, the responsibility for the administration of classified rural roads was initially given to the Rural Road Construction and

¹³ Road professional, Addis Ababa, 27 July 2009.

Maintenance Department, which was set up within the Bureau¹⁴ of Works and Urban Development of Oromia in 1993/94. In 1996, the Oromia Rural Roads Authority (ORRA) was established by the Regional Government and given “...the mandate to undertake the construction and maintenance of rural roads in the region” (Oromia Today 2009:102). Following similar institutional paths (cf. ILO 2009:3), semi-autonomous Regional Roads Authorities have also been established in Tigray, Amhara, Gambela, Benisangul-Gumuz and Southern Nations Nationalities and People region, while rural roads are under administration of the Regional Bureau of Rural Development in Afar and Somali region (ERA 2008b:24-25).

However, the RRA’s general responsibility is to improve and expand the regions rural road network. This network excludes the roads already classified as ERA’s federal roads and the urban roads independently administered by the municipalities (ERA 2008b:25; 2009a:18). The RRA’s duties are further clarified in accordance with the RSDP: “1. Preservation of the existing network; 2. Provision of access to agricultural potential, food deficit and neglected areas; 3. Improvement of the availability and management of equipment for the construction and maintenance of roads; 4. Promotion of the use of labour-based technologies and community participation in regional and local programme; 5. Provision of community based integrated village travel and transport services; 6. Reduction of the adverse environmental effects through improved design standards; 7. Improvement of resource mobilisation through suitable road pricing” (ERA 2008b:24).

Within the regions, rural roads can be classified into high-standard regional roads administered by the regional state and low-standard community roads, which are under the responsibility of the *woreda* (Kumera Kanea 2007:118). According to the ERA (2008b:26) “...more than 70’038.10 km of community or low-level rural roads ... [have been] administered by *woreda* road desks”.

14 A Bureau at regional level holds a similar position as a Ministry at federal level.

5 Modes of Construction

5.1 Contract construction

During the period of the IHA, minor constructions, maintenance feasibility studies, plans, surveys and design works were done by the authority's own work force. However, given the weak construction capacity of the IHA, the major road projects were undertaken by foreign constructors on contract base. This kind of contract construction was the general or predominant mode of operation during the first four Highway Programmes (Ayele Tarekegn 1987:22-23). In the late imperial period, domestic, local small-scale construction companies also emerged. They started to participate in feeder road construction and strengthened the domestic construction capacity. This turning point was triggered by the initiative of the imperial government, foreign financiers and some foreign contractors, who started to open up local branches in order to increase their competitiveness (Melese Mamo 2006:15-16). With the introduction of a socialist policy in 1974, the domestic private construction companies were confiscated and nationalised (Ayele Tarekegn 1987:57-58). Thus, state-owned construction enterprises were established and assured the monopolisation of the road construction activities in Ethiopia. During the period of the Derg, the "...overall responsibility for all management processes including planning, designing, constructing and contract administrating..." was held by a single governmental institution (Melese Mamo 2006:16-17).

After the fall of the socialist government, a transformation toward a free market-based economic policy took place (Melese Mamo 2006:18). In opposition to the policy of the previous socialist government, the arrangement of state-owned enterprises became considered as inefficient; it was identified as the reason for the lacking provision of the required services. "... Due to the pressure of the donor community and partly due to internal government initiative" (Becker/Demissie 2006:23), privatisation became the focus. The new government assumed that the integration of public and private sector would create an efficient partnership for the provision of road infrastructure. On the one hand, the strengths of the public sector were seen in "...legal authority, formulation of procurement policies, balancing competing needs of the public and capital resource" (Becker/Demissie 2006:14). On the other hand, the strengths of the private sector were indicated in "...management efficiency, innovations, working efficiency and cash flow management" (Becker/Demissie 2006:14). The private sector was now considered "... as a means in delivering physical infrastructure" (Becker/Demissie 2006:14), which highly affected the mode of construction at the federal but also at the regional level.

In accordance with the policy privatisation, the ERA started to implement road projects by making use of the private sector for design as well as construction. In regard to the design of the road, the ERA's "...in-house design preparation was discontinued and private consultants were entrusted with the task" (Becker/Demissie 2006:23). Construction activities of the in-house force unit were significantly reduced and private partners put most of the projects for competitive bidding. Consequently, the contract-

ing authority, the consultant and the contractor became the three main stakeholders of road projects. In a specific project, several steps can be distinguished, today, from the planning to the implementation of a road. For the initial planning stage, the authority hires an engineering design firm. This consultant elaborates the particular road design, which defines the standards and technical specifications of the road. In a second step, different construction firms bid for the project based on the elaborated design. The winning contractor assigns a project manager with the responsibility of constructing the road. For the ensuing construction of the road, the contracting authority nominates a consultant for the supervision, the completion and the approval of the contractors work. In particular, the consultant is represented by a task team, which is entrusted with the consultant's duties. Finally, the authority (ERA) takes over the completed road project in order to administer and manage it (Becker/Demissie 2006:11-25).

The new arrangement aimed at implementing road projects by contracting out projects to private consultants and contractors led to the restructuring of the ERA¹⁵. These changes had significant impacts for the authorities' own construction division. Concerning the construction of roads, the increasing number of projects put up for competitive bidding had minimised the responsibilities of the ERA's own unit for construction (Becker/Demissie 2006:14,23). In line with this trend, the idea of separating the ERA's regulatory roles from its operational functions has emerged since about 2004. The separation plan was recently pushed forward in connection with the finalisation of the Business Process Reengineering (BPR). This would mean that "...the regulatory body continues to operate with federal allocated budget and follows the RSDP, [while] the new corporate entity is expected to function on a profit base like any state enterprise, bidding for road project contracts against both local and international firms" (Fortune 2009b).

In 2001/02, the bulk (90%) of federal road construction work was contracted out to the international and local sector (WB 2001). While foreign companies are well equipped and able to meet the requirements for participation in donor-financed projects, local contractors are less experienced and equipped (Becker/Demissie 2006:24-25). Therefore, the latter are mostly involved in projects financed by the government. During the initial period of the RSDP III, local contractors increased their participation to about 60% to 70% in terms of value and number of projects, expressing the programme's attention paid to develop the capacity of the domestic construction industry. Despite this improvement of the domestic construction industry's capacity, local contractors remained marginally involved in large construction contracts. In complement to these contracted road projects, the "...ERA is carrying out few civil works by its own force accounts in areas where the private industry is not willing to go and in some urgent projects" (ERA 2008b:3-4).

At the regional level, privatisation has with become the mode for ORRA's road constructions, some delay. The focus in road construction is to "...contract out larger road

15 With respect to the in-house design, significant changes took place in the late 1980's. International Monetary Found, World Bank and other foreign financiers had expressed strong critics toward the previous Ethiopian Transport and Construction Authority's overall responsibility for the implementation of road projects as employer, consultant and contractor. As a consequence, the Transport Construction Design Enterprise was established out of the Ethiopian Transport Construction Authority as an autonomous entity by a government proclamation (No 108/1986). The Transport Construction Design Enterprise took over the responsibility for design, contract administration services as well as monitoring and controlling road projects (Melese Mamo Gebere 2006:17).

constructions to the private contractors and shift the focus of OR[R]A mainly to rehabilitation and maintenance of rural roads” (ORSG 2009). However, between 1990 and 1999, only about ten percent¹⁶ of the newly constructed roads in Oromia were contracted out (ILO 2008:40-41). In 2007/08, still only nine percent¹⁷ of the construction projects were contracted out, while the share of the ORRA’s own construction force remained predominant (Oromia Today 2009:103). The ORRA was restructured in September 2008 and undertook a major step toward a privatised arrangement for road construction in the region. In the process, the ORRA’s own force unit for construction was separated and transformed into a state-owned contractor, the ORCE. The former ORRA was recently renamed ORA.¹⁸

With the creation of the Oromia Road Construction Enterprise (ORCE), the operational functions and regulatory roles were separated. The ORA remained the regulatory body undertaking coordination, planning, construction, administration and maintenance of roads on the base of governmental budget allocation. In contrast, the ORCE as the operational body is implementing construction and maintenance road projects on the basis of the contract agreement with the ORA. In accordance with the importance of the previous ORA’s own construction force unit, the ORCE overtook the bulk of the regional road projects. Thus, the recent construction and maintenance management in Oromia is generally characterised by the involvement of a client (ORA), a contractor (ORCE or private contractors) and a consultant (ORA, public or private consultant).¹⁹

5.2 Labour-based construction

With the establishment of the IHA, the Ethiopian road sector was born²⁰ and a domestic construction capacity started being developed. Nevertheless, unskilled human labourers remained the main construction force for the time being. Three different groups of IHA projects could be distinguished in terms of labour composition. First, the IHA’s own construction and maintenance project, in which mainly unskilled daily labourers were employed, besides contract and permanent (semi-skilled and skilled) workers. While the former two were accommodated in rather poorly equipped IHA camps, the unskilled daily labourers were local people from the surrounding area where the road was being constructed. Second, the ‘self-help’ road projects conducted by the public between 1957 and 1968. These projects were conducted by public contribution in the form of unskilled human labour; the IHA supported this work with trained personnel. Third, the construction contract highway projects were also constructed through the involvement of semi- and unskilled local workers [labour] in complement to the skilled

16 Between 1990 and 1999, only about 10% (5 of 49 in number) of the newly constructed rural roads in Oromia were constructed out (ILO 2008).

17 In 2000EC, the ORRA implemented a total of 26 construction projects. Only three of them were contracted out to constructing and consulting firms (Oromia Today 2009:103).

18 Road professional, Addis Ababa, 8 September 2009.

19 Road professional, Addis Ababa, 8 September 2009.

20 Previously, roads were ‘constructed’ by the involvement of human labourforce. During the reign of Emperor Menelik II, the roads were implemented in feudal fashion by labourforce of troops on campaign, of farmers as well as foreign employees. During the Italian occupation, the huge expansion of the road network was mainly established by unskilled human labourforce. While the Italian construction firms had employed foreign labourers from Italia, Eritrea, Lybia, Sudan and Yemen, Italian soldiers had been put to road building operations and even constituted the principle labourforce (Ayele Tarekegn 1987:2,7).

foreign highway professionals (Ayele Tarekegn 1987:22-27). Despite the importance of unskilled human labourers in all these projects, the machine- or equipment-based construction was seen as technically and economically superior in terms of speed, quality and costs (ETCA 1986:13). The mode of construction by human labour was chosen for pragmatic reasons, i.e. the lack of capacity, construction equipment and skilled road professionals.

However, this attitude changed with the emergence of the labour-intensive and labour-based approach to construction of rural roads in Ethiopia in the 1980s. Initiated by the World Bank and the International Labor Organisation (ILO) in several other African countries in the 1970s and 1980s, the labour intensive- and labour-based construction of rural roads was presented as economically efficient and technically feasible. These donors considered the approach as a remedy for development countries where – in contrast to industrialised countries – unemployment and underemployment were seen as crucial development challenges. In contrast to Rostow's (1963 in: McCutcheon 1989) idea of development and growth through the transfer of technology and techniques to developing countries, the labour-intensive approach placed particular attention on the use of local resources (McCutcheon 1989:109-111). The labour-intensive approach became defined as "...the economically efficient employment of as great a proportion of labour as is technically feasible, to produce as high a standard of road as demanded by the specification and allowed by the funding available" (McCutcheon 1989:110). In other words, it was assumed that the labour-intensive approach creates job opportunities in rural areas and an economically cost-effective construction technique. At the same time, the approach was assumed to be able to construct technically high-quality rural roads. Because of these characteristics, it was considered an appropriate substitution for equipment-based construction methods, neither increasing the economic costs nor decreasing the road's quality (McCutcheon 1989:110).

In Ethiopia, labour-based approaches emerged in line with increasing attention paid to rural roads during the Derg, and turned out to be economically and technically suitable for the country's situation at the time. However, labour-based construction is complemented by the support of machines and an appropriate organisation. The origin of this approach goes back to the United Nation Development Programme-financed training project, by which the ETCA's RRD developed the capacity for the application of the approach. In 1984, a pilot project was launched in order to test the approach's suitability for construction and maintenance in Ethiopia (ETCA 1986:1). The ETCA concluded that "labour-based, equipment supported methods of road construction (even to high quality 'RR-30' standards) are technically and economically viable in the Ethiopian environment" (ETCA 1986:29). The particular emphasis on complementing the use of labour by the use of appropriate equipment marks the distinction between labour-based and labour-intensive approaches. While the labour-intensive approach aims at maximising the labour input, the labour-based approach uses "...labour as a key resource but complemented by the use of appropriate equipment for those operations that would be inefficient and costly if laborer only was used" (ILO 2008:7).

Concerning organisational aspects, the development of an appropriate organizational structure in the ETCA was considered as crucial for an efficient application (ETCA

1986:29,30). This implied a modification of the administrative system, particularly with respect to the relation between the ETCA, the RRD and its employees. Additionally, the creation of operational units with trained staff and equipment seemed to be inevitable. Finally, payment of a salary was seen as the basic motivation for labour and thus crucial for the success of the approach. The ETCA (1986:17) states: “Motivation is the key to the success of labour-based activities and in turn reduces the overall level of supervision required”. “...a fair day’s pay for a fair day’s work” (1986:17) had to be defined for the unskilled daily labourer employed. In contrast to the authority’s contract and permanent labourers being employed annually, daily labourers were employed on a task-based system. As a consequence, road activity was broken down into equivalent tasks to be accomplished by individuals or teams within an average day (ILO 2008:7).

The recent government follows the ETCA’s argumentation by taking up the general idea of the labour-based approach in its new (rural) development policy. In the PASDEP, the creation of job opportunities is one of the programme’s eight main pillars of poverty reduction. Accordingly, the PASDEP emphasises the importance of the labour-based approaches especially for the labour-intensive construction sector (ILO 2008:6,28). A similar focus on labour-based approaches in general is also given in the PSNP within the ADLI strategy. Particularly in relation to food security, the programme adopts a labour-based approach in which cash or food is transferred to households in exchange for the provision of labourforce (FDRE 2004:4-6). However, the labour-based approach adopted in the road sector significantly differs from those in other sectors.

During the era of the Derg, the labour-based approach was predominantly the domain of the ETCA’s RRD, whose capacity was limited at the time. In the construction season 1985/86, only three operational units were created in terms of staff and equipment for road construction by the adoption of the labour-based approach. Since then, the labour-based construction capacity has significantly increased, in line with the newly established decentralised setup in the road sector after 1991. Recently, the majority of roadwork in Ethiopia has been carried out by the adoption of machine-based or equipment-based approaches for which the ERA, ORA (later ORCE) as well as public and private contractors are now equipped. Complementary, labour-based approaches are adopted for certain maintenance activities of federal roads but especially for the construction and maintenance of rural roads. The RRAs in particular use both equipment-based and labour-based approaches for the construction and maintenance of rural roads. Between 1990 and 1999, 50% of the newly constructed rural roads in Oromia were implemented by the labour-based approach (ILO 2008:1-7,40-41). With the separation of the ORA’s own construction force, the ORCE overtook the operational units for the labour-based approach. However, in the construction period 2008/09, only four of the 26 ORCE construction projects were undertaken through the labour-based approach.²¹

²¹ Road professional, Addis Ababa, 27 July 2009.

6 Rural Road Construction in Meta Robi

6.1 The road network in Meta Robi

Meta Robi is one of 180 *woredas* in the Oromia region and located about 100 km north-west of Addis Ababa in the West-Shewa zone. Shino, the district's capital, is located in the southern part of Meta Robi. The district lies in a hilly landscape at elevations from 1,200 to 2,900 m above sea level and can be classified into three agro-climatic zones: (1) The rather flat or gently sloped lowlands (*kolla*, 1,200 to 2,000m), (2) the midland (*woina dega*, 2,000 to 2,400 m) and (3) the sloping highland (*dega*, 2,400 to 2,900 m) (Woreda Meta Robi 2008/09:2-3). Precipitation is relatively low and mainly occurs during two seasons: The small rainfall, locally called *belg* rain, between March and April, and the big rain called *meher* rain between June and September (MKC-RDA 2009:2)

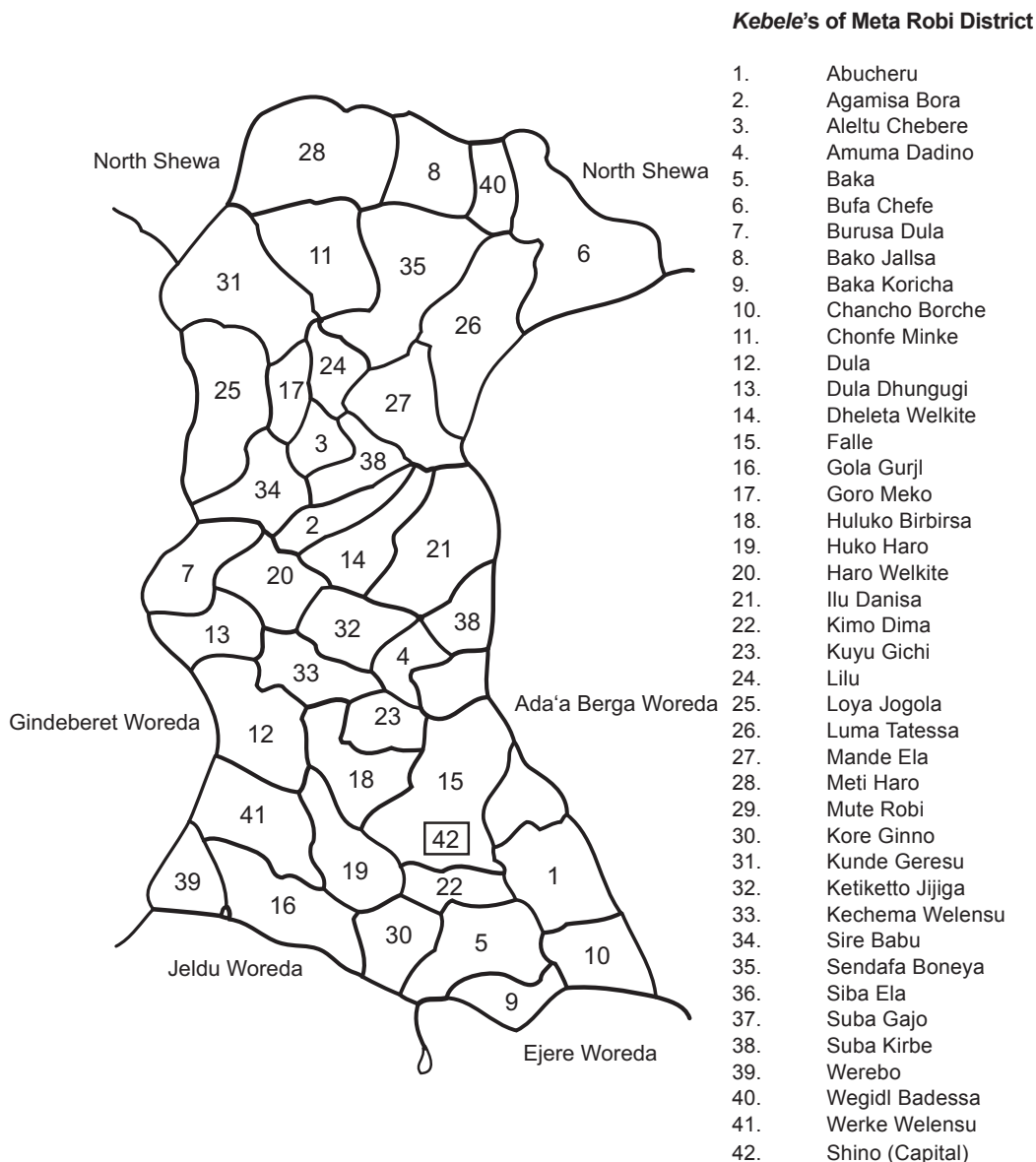


Figure 3: Territorial map of Meta Robi *woreda*, West-Shewa zone, Oromia, (Source: own map, designed based on *Woreda Meta Robi* 2008/09)

[illegible]

However, the agricultural productivity in the district is low, caused by “...small land holdings, traditional farming practices, crop and livestock diseases, limited use of agricultural input, and erratic rain fall” (MKC-RDA 2009:3). The rural district exhibits a poor economic diversification and is thus highly dependant on the agricultural sector. Only a few small-scale industries such as flourmills exist, but large-scale industry is completely absent. As a result, there are hardly any alternative off-farm employment opportunities for the people (MKC-RDA 2009:3).

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In 2001 EC, Meta Robi's classified rural road network amounted to a total length of 183.8 km (see Figure 4: bold backline), whereof 85.8 km were all weather roads and 98 km were dry weather roads (Meta Robi WRRO 2009 in: Woreda Meta Robi 2008/09:7). The road network length per area of about 190 km per 1000 km² is high compared to the national value of 104 km per 1,000 km² (ERA 2008b:8). However, this pattern reverses when evaluating the road network length per capita, where the Meta Robi district (1.3 km per 1,000 people) exhibits a smaller than the national value (1.45 km per 1,000 people).

The road network can be categorised according to the technical quality of its roads. There are 52 km of gravel-surfaced roads, which can be classified following the design standard DS-6 or RR-50 (see also Chapter 2). These gravel roads link the northern part of the *woreda* and the district's capital in the south to the asphalt road (outside the district), which leads to Addis Ababa or to the zonal capital Ambo. In contrast to these high-standard regional roads, the majority of the roads are low-standard community roads. It is difficult to consistently define the technical standards of these roads, but they mainly range between DS-7 and DS-10 or RR-30 and RR-10. This variety is due to the different conditions under which these roads were constructed in terms of soil, material, rain, altitude etc., but also due to different modes of construction at different times.

The district's network has been constructed and maintained by a variety of actors, in various ways and construction eras. Already the Derg engaged in the extension of the network and constructed the linking road to Shino in 1973/74. The road was constructed using a labour-based approach and according to RR-50 standard. In addition, a variety of non-governmental actors engaged and still engage in the extension of the road network that is reported to be working on roads in the northern part of the district. The *kalu* – a traditional leader – also engaged in construction or at least maintenance activities in order to facilitate his access to rural areas at traditional celebration days. There are further reports of (wood-)traders, who maintained roads spontaneously in order to enable or grant transportation of particular resources. Additionally, the municipality administers the urban roads in the district's capital. However, the bulk of the roads in the district are constructed by community contribution through human labour or people's participation in various ways, while machine or equipment-based constructions are absent.

In regard to state-led rural road construction, two particular rural roads are of special interest, as they bring together a variety of actors (see table 3). On the one hand, community roads are constructed by the local administration and by the participation of the community mainly after the rainy season. In this case, the activities are initiated by the WRRO, which orders the *kebele* administration to construct a particular road. In the *kebele*, the road is divided among *sub-kebeles* in which people are organised for construction activities. On the other hand, a regional road was built in a construction project in the dry season between 2008 and 2009. The project was the initiative of the community, to which the regional government responded. Accordingly, the ORA was entrusted with the construction; they contracted out the road to the ORCE for its construction. Based on the construction camp in the district, the ORCE accomplished the

construction using a labour-based approach and employing labourers on a daily base. While the ORCE staff was in direct interaction with the labourers, the local administration's role was reduced to cooperation and assistance if required.

Table 3: Rural road construction in Meta Robi.

	Community road	Regional road
Construction period	Continuous construction and maintenance activities mainly in September/October after the rainy season	Project between September 2008- December 2009
Design standard	>DS-6	DS-6
Professional body	WRRO	ORCE
Construction method	Construction by community participation	Labour-based construction
Main actors	Local administration (<i>woreda</i> , <i>kebele</i> , <i>garee/sub-kebele</i>), participants	ORCE, labourers
Main interaction	<i>Garee</i> leaders-participants	ORCE, labourers

6.2 The regional road

The idea of constructing a road between Shino and Kettketto initially arose in the district itself in 2004/05. As a first step, a road construction committee was founded outside the governmental structure for the organisation of the *kebele* people. In addition to the main-committee in Kettketto and several sub-committees in other *kebeles*, an additional one was established in Addis Ababa in order to organise individuals, born in Kettketto and the surrounding area. In 2005/06, a bazaar was organised in order to make the demand for the road public and to gather the financial means for its construction. The bazaar tried to address the population of the district, particularly rich people living in Addis Ababa as well as in the regional state's government. The bazaar was therefore replicated twice, once in Kettketto and the second time in Addis Ababa. In Kettketto, a festival was organised, local drinks were sold, artists were invited and local dances performed. During the bazaar, some of the district *kebeles* as well as private individuals contributed money for the construction of the road. As a special guest, Abadula Gemeda – the president of the Oromia Regional State at that time – took part and expressed his solidarity with the people by wearing local traditional clothes. By the end of the bazaar, the regional president promised to construct the road between Shino and Kettketto. As a result of its successful initiation of the road project, the road committee stopped working after receiving the regional president's promise.

Although the bazaar had collected several 100,000 ETB as a so-called community contribution, the regional government allocated the necessary budget while the money collected remained in the bank. Two years after the bazaar, the budget was allocated and the ORA assigned the responsibility to construct the road between Shino and Kettketto. In line with the general construction proceedings (see also section 5.1), the ORA

contracted the ORCE as the constructor and the Oromia Water Works Design and Supervision Enterprise (OWWDSE) as the consultant. In September 2008, the ORCE built the construction camp in the district in Huluko Birbirs *kebele* as the base for new construction activities.

During the road construction project period, different institutions and actors were involved, holding different responsibilities. First, the ORCE, a semi-private enterprise, held the responsibility of constructing part of the road. A project manager and a project engineer represented the ORCE in the field. Several ERA-trained foremen operated as the construction superintendent, the construction intendant and labour foremen. Second, the *woreda* administration had no formal connection to the construction project but remained responsible for the overall activities in the district. The *woreda* consequently only intervened if problems arose, especially with respect to conflicts between the ORCE and the labourers employed, or with farmers affected by dispossession of land. Although the *woreda's* road office had trained road professionals available, the office had no formal link to the ORCE and only cooperated and assisted if required. Third, the *kebele* administration, particularly the *kebele* chairman, was seen as the lowest administrative unit that was cooperating with and assisting ORCE. Fourth, the project was accompanied by the OWWDSE, which was entrusted by the ORA for the periodic approval of the ORCE's implemented construction work. Being the consultant, the OWWDSE was represented by a team of four road construction professionals (resident engineer, work inspector, purveyance inspector and their driver) that visited the project once a week. The team was responsible for the approval of technical issues and it was in contact exclusively with the ORCE staff. For these reasons, the following paragraphs do not pay great attention to the OWWDSE's role in the construction.

In technical terms, the rural road was constructed in line with the design standard DS-6 or the standard for RR-50 and the according construction steps. After establishing the centerline of the road, in a first clearing step trees were cut at a distance of 15 m both sides of the centerline. In the second step of grubbing, stumps and top-soil layers were removed on a band of 12 m. Third, after having cleared and grubbed, the topography of a 10-m band was evenly leveled. In a fourth step, ditches were dug on the left and the right side of the band. These ditches constituted the base for the further completion of the drainage ditches in fifth step. The material excavated in the fourth and fifth steps was thrown toward the center of the road, where it was shaped to form a loose camber of 6 m and compacted in step six. At last, a surface layer of selected granular material was placed on the remaining six-meter band of the newly emerging road. Furthermore, structures such as pipes were constructed in case of necessity. The road construction was implemented with a labour-based approach so that the earthwork up to step six was exclusively undertaken by local labourers equipped with hand tools. In line with the labour-based approach, machines were used to transport the surface material, while the labourers did the dispersion. The partial substitution of labourers by machines after step six decreased the demand of labourers by the end of the project.

The road construction involved three kinds of labourers, which can be categorised according to their professional skills. First, the ORCE's skilled staff, which consisted

of mainly professionally trained road specialists. This ORCE staff totalled about 28 professionals, for example, tractor operators, dump truck drivers and construction foremae in the construction section, or radio operators and a chief cook in the administration and property section. These skilled labourers were permanent employees of the ORCE and earned different salaries according to their profession and their contract agreement. They originated from different areas all over Ethiopia and were accommodated at the ORCE's camp. Second, the semi-skilled labourers had certain useful expertise or educational background. Examples of a semi-skilled labourer included a mason who could construct the pipes for the erosion water or a student who could handle certain technical instruments. These semi-skilled labourers were originally from the surrounding area and employed by the ORCE on a daily base or with a contract agreement. They earned between 35 and 50 ETB per day.

Third, the unskilled daily labourers were those who implemented the road construction by their manpower. In general, the people of the district who were employed by the ORCE for 12 ETB and later for 15 ETB undertook these activities. The payment was tied to the accomplishment of a work assignment. Working stationeries were determined in meters and assigned to a group of labourers for the accomplishment of a certain step (according to DS-6). For example, a 20-m stationary was assigned to a group of about ten labourers for the first two steps of clearing and grubbing. The stationeries' length depended on the problems in terms of trees and grass. After having finished these steps, a second group of about four to six labourers, depending on the location and the soil were assigned for the leveling and the construction of the ditches. A labour foreman who coordinated and assisted the labourers accompanied the activities at the stationeries. He also controlled whether the standards were met. It was also the labour foreman who decided whether or not the group had accomplished its daily work and could leave. The labourers worked until the assigned duty was fulfilled, which took them on average four to seven hours. The road construction took place on working days from Monday to Saturday. In addition to the groups of labourers working on the road, there was a group of stone splitters working at the quarry, where the granular material for the surface layer was selected and prepared. Unskilled daily labourers constituted the majority of workers involved in the project.

The selection of the unskilled daily labourers was based on the ORCE's internal construction plan and criteria, which define what kind of labourers are appropriate. The decision about the employment of a particular labourer was taken by the ORCE, specifically by the construction foreman in collaboration with the project manager. Physical strength is the most important criteria for the selection of an appropriate labourer for the construction of roads. Accordingly, applicants were selected because they were strong and healthy, while applications of weak and disabled applicants were rejected. The majority of the labourers involved were between 20 and 35 years of age, and no one was above fifty. In principle, the selection criteria did not exclude women. The reason for the absence of women as labourers seems to be rooted in cultural reasons.

When the construction started, about thirty to forty applicants were employed as labourers for the construction of the road. After a few months, the number of labourers had increased to between 300 and 350, but started again to decrease a few months

before the temporary stop at the beginning of the rainy season. During the project, labourers mainly from the five *kebeles* crossed by the road (Shino, Kimo Dima, Falle, Huluko Birbirsu, Kechema Walensu) were employed, but also labourers from some other neighboring *kebeles* (for example Huko Haro, Baka or Kuyu Gichi) were engaged in the construction of the road.

After about 10 months of ongoing construction activities, the project stopped in July 2009 with the arrival of the rainy season. At that time, about 13 km of the road had been successfully accomplished while about two kilometers remained to be paved and surfaced. After the rainy season, the project continued and was finished in December 2009. According to the contract agreement between the ORCE and the ORA, the finished road was committed to the ORA as the owner of the road. Accordingly, the future maintenance will be the ORA's responsibility and should be contracted out again.

6.3 Community roads

In Meta Robi, the local government holds the responsibility for the construction and maintenance of community roads in the district's territory. This local government is represented by the *woreda* administration and 42 *kebele* administrations (41 located in rural *kebele* field offices and one urban *kebele* located in Shino, the district's capital – see also map 2 and 3). At the *sub-kebele* level, the government established the *garee* or so-called *garee misoma* in 2003²³ in order to – among other purposes²⁴ – facilitate the participation of the community and road construction activities (see figure 5). A *garee* contains about twenty to thirty households²⁵ and organises the household heads²⁶ in the *garee misoma*: so-called development teams.

However, the *woreda* holds the overall responsibility in the district and the authority to plan and initiate socio-economic development. According to the *woreda* administrator²⁷, the *woreda* follows a five-year plan. It constructs (1) linking roads as *woreda-woreda* roads, (2) *kebele-kebele* roads and (3) roads, which link the *garees* to the *kebeles*. In line with the overall District Development Plan (DDP), the district's road network is planned by the WRRO – established in 2002/03²⁸ – who is responsible for administering, constructing and maintaining the road network within the district's territory. At the WRRO office, three road professionals are employed who partly received

23 Based on the data collected, the initial establishment of the *gott* and the *garee* dates back to the year 2003. Although this date is the common sense among the majority of people interviewed, the information ranges between 2002 and 2004. According to other reports, *gott* and *garee* were established in 2004 (cf. HRW 2005:30).

24 The *garee* engages also in other development related projects such as irrigation, education, health or mobility, and mainly realizes the construction of the infrastructure required. In addition, *gott* and *garee* also engages in security related activities and in conflict resolution at the household level (cf. Bevan/Pankhurst 2007).

25 Among informants in Meta Robi, it is widely believed that the number of households organized by a *garee* is defined by government standards. Despite the absence of corresponding documents, the number is about 20 to 30 households in Meta Robi depending on settlement patterns and the size of the *kebele*.

26 The household head is traditionally called *abba warra*, as the one who owns the land and thus pays taxes to the government. In case of his death, the widow becomes the *garee* member because she has inherited the land and the according duty to pay taxes. Although they constitute a fairly permanent team, the participation is not limited to those who pay taxes. Depending on the specific development activity to be undertaken, the composition of the participating team can vary, e.g. by excluding widows and elders or by including an additional, predominantly young household member.

27 Adugna Hirpa, Shino, 13 July 2009.

28 According to information of the Head of the office (Shino, 24 August 2009), the WRRO was established in Meta Robi in 1995EC.

a basic professional training at the ERA. The office administers the community road network and executes the overall development plan. The office is funded by the *woreda* budget, but does not have its own financial resources for its construction activities. Besides planning it is mainly responsible for supervision and coordination activities. On this basis, the WRRO formulates an action plan defining the geographical location and length of the road to be constructed in a particular *kebele*. In 2008/09, the office had planned 35.5 km of dry-season roads (standard RR-10 to RR-30) of which 25.5 km were successfully constructed.²⁹

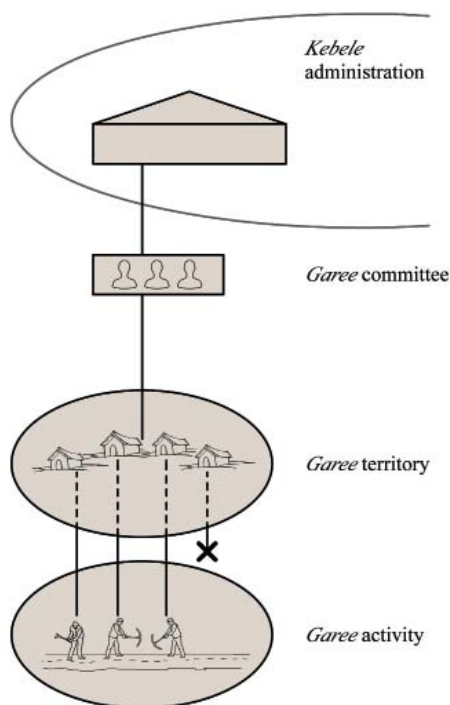


Figure 5: The *garee*'s institutional structure for undertaking development activities in its territory.
(Source: own design)

In contrast to the *woreda* administration, the *kebele* administration does not contain a specific position that is responsible for road construction. As a result, the *kebele* administration in general becomes responsible for the organisation of people for the implementation of the planned activity as soon as the WRRO communicates its action plan. Accordingly, meetings are said to be held at the *kebele* and *garee* levels, where the issue of the road is discussed. With respect to the construction activity, the road is divided by the *kebele* administration and distributed to the *garees*. Accordingly, each *garee* is assigned a particular section of the road depending (1) on the number of the *garees* within the *kebele*, but also (2) on the slope and the soil at the location allocated. For the accomplishment of this part, the *garee* leader³⁰ orders the people of his *garee*

²⁹ Head of *Woreda* Rural Road Office, Shino, 24 August 2009.

³⁰ The *garee* members elect their own *garee* leaders as their formal representative, which initially form a *garee* committee consisting of five members. These committees were not directly linked to the *kebele*, but rather associated to the *gott*. Territorially, the *gott* was larger than the *garee*, and each *gott* contained in average two to three *garee*'s or about 60 to 90 households, depending on the *kebele*'s size. Institutionally, a *gott* committee of five members bridged

to meet at a specific place and date. These – and other *garee* development activities – mainly take place after the rainy season on non-working days such as weekends or religious holidays.

During the ongoing construction activities, the role of the WRRO only consists of sporadic visits. The *kebele* administration follows the activity also through supervision and coordination, but in a much closer way through its frequent and close contacts with the *garee* leaders. However, the *garee* leaders execute the *kebele*'s order by organising and coordinating the participants, by checking on their presence or absence and by their own participation. In addition, the *garee* leaders report on possible absences of participants and on the progress of the activities to the *kebele* administration.

In technical terms, road construction is undertaken by popular participation without the use of machines. In each *garee*, the technically unskilled *garee* leader organises and leads the manual works that include clearing the surface and digging uneven parts of the ground. It is mainly the able male *garee* members who are organised; women seemingly do not take part in road construction activities. The participants can leave the work when the allocated road part is accomplished. The time of working is therefore not precisely defined, but based on the data collected, it amounts to only a few days and less than seven days per service. In accordance with participation in *garee* activities on non-working days, road construction can continue during a couple of weeks. In addition to the people's contribution of labour, the participants also bring their own tools as equipment for their work.

Roads must also be maintained, and the *garee* normally has to repair roads after the rainy season. There is no binding rule that defines how frequently a road has to be maintained; it depends rather on the condition of the road after the rainy season. The initial construction of these roads was accordingly undertaken by the current government or dates back to a previous regime. Additionally, the *garee* does not exclusively maintain roads of a particular design standard, but all the different roads in the district. Generally, the organisation and technique of road maintenance seems to follow similar patterns as for the construction of roads. However, based on the reduced workload for road maintenance activities and corresponding limitation of the data collected, some ambiguities emerge. First, it is rather difficult to determine whether all maintenance activities are initially planned by the WRRO. Second, with a possible initiative of the *kebele* administration's initiative, it is unclear whether the *woreda* is also involved. Third, it is not clear whether all *garees* are ordered for each maintenance activity or only the *garee* where the damaged part of the road is located. And fourth, and most fundamentally, the question remains whether the district's roads are regularly maintained.

the gap between the *garee* committee and the *kebele* administration. The *garee* committee was accountable to the *gott* committee, which in turn was accountable to the *kebele* administration. In 2008, the government dissolved the *gott* committee, and the *garee* committee became directly linked to the *kebele* administration. While the *gott* collapsed institutionally, it still exists territorially. There, it is still used for specific purposes, i.e. as a reference for the geographical organization of the *garees* enclosed. In line with this institutional change, the *garee* committee was also restructured and reduced to three representatives: (1) The *garee* chairman, (2) the secretary and (3) the cashier. Thereby, the *garee* chairman is the most important actor with respect to activities within the *garee* itself, but also concerning the *garee*'s link to the *kebele* administration.

7 Conclusion

The EPRDF government has impressively expanded the road network from 19,020 km in 1990 to 114,397 km in 2008, of which rural roads account for 93,968 km (either as regional or community roads). Today, Ethiopia's rural road network branches out into remote and previously inaccessible rural areas with significant political, economic and social consequences for the country and its population. In this paper, I have argued that this impressive expansion is both the result of the great attention the EPRDF government has paid to road construction, as well as the classification and incorporation of rural roads that has accompanied the decentralisation process in the sector. Decentralisation has rendered rural roads at local level increasingly visible and has expanded the state's grasp over its territorial infrastructure. In addition, decentralisation has made state-led rural road construction both a regional and local issue, has created new sites for state-peasant interactions and has diversified the ways the state is represented in people's everyday life.

The historical roots of rural roads as an overt development issue can be traced back to the former regime of the Derg. Whereas the Imperial Highway Authority (IHA) mainly focused on highways, the Derg shifted its attention also to rural roads. In contrast to the Imperial regime and its emphasis of the modern sector of the economy, the Derg acknowledged the importance of the rural population and agriculture for the country's development (cf. Dessalegn Rahmato 2008b). Following the 'pro-peasant' agrarian policy of the socialist Derg, the integration and accessibility of rural areas gained considerable attention, which inevitably led to the promotion of rural roads. From the late 1970s onwards, rural road infrastructure increasingly became a policy issue and resulted in the formulation of policies and programmes addressing the challenges identified in the rural areas. In addition, the Derg significantly strengthened the operation, organisation and construction capacity of the road sector through the nationalisation of constructing firms and the establishment of the Rural Roads Department (RRD) – at the same level as the Highway Department under the Ethiopia Road Authority. These institutional changes paved the way for professionalisation, standardisation and classification in the emerging rural road sub-sector as well as the development of approaches suitable for rural construction. The labour-based approach, in particular, came to be seen as an alternative to cost-intensive equipment-based approaches and as an economically and technically viable model of construction for Ethiopia's situation. In addition, the growing number of road professionals allowed the formation of first appropriate operational units for the construction of rural roads.

Since its establishment, the EPRDF government has further promoted rural road construction and the advancement of the sector constructing it. Until today, the importance of rural road infrastructure has been acknowledged in the country's overall development policies as well as in a number of sector programs. While the accentuation of rural road infrastructure in these documents echoes the Derg's emphasis on socio-economic development, the focal point later shifted from rural areas – in the Agricultural Development Led Industrialisation (ADLI) programme – towards poverty reduction – in the Plan for Accelerated Sustainable Development to End Poverty

(PASDEP). Within its broader road sector development policy framework, the government formulated the Ethiopian Rural Travel and Transport Programme (ERTTP) as “...an integrated rural development initiative...” (ERA 2009a) that further combines the construction and expansion of rural road infrastructure with the provision and increase of other transport and non-transport facilities at district level. In addition, the government has confirmed its focus on rural roads by the formulation of the Universal Rural Access Programme (URAP) that aims at connecting all *kebeles* in Ethiopia. Despite the great attention these programs have drawn in media and planning circles, they have not (yet) had a similarly significant impact on the physically constructed road network on a large scale.

Looking beyond the development policy framework, decentralisation reforms have significantly affected the way in which the rural road sector is organised and operates. Although the growing importance of rural roads had already induced a debate about the appropriate institutional setting during the period of the Derg, the road sector was first decentralised after the arrival of the EPRDF. Rural Roads Authorities (RRA) were established and decentralisation continued with the creation of the Woreda Rural Road Offices (WRRO) at district level. This process of dividing responsibility among different administrative levels is also expressed in the classification and categorisation of Ethiopia’s road network. While the road network had encompassed federal and regional roads after the first phase of decentralisation, community roads at district level were included as a new category in the classified road network through the second phase of decentralisation. Moreover, decentralisation and the classification process has increasingly incorporated rural roads at local level and expanded the state’s grasp over its territorial infrastructure. However, the road sector has further experienced significant changes due to the EPRDF’s privatisation reform – as part of decentralisation. Turning away from the country’s socialist past, privatisation has acknowledged the role of the private sector in delivering road infrastructure and resulted in an increasing number of road projects contracted out to private consultants and contractors. The reform has significantly affected the regional authorities and has also led to the later separation of operational and regulatory roles and functions and the establishment of state-owned enterprises – as happened in Oromia recently.

When it comes to the local level, the EPRDF’s decentralisation and development policies have affected the interaction between the state and the peasantry and have diversified the way the state is represented in people’s everyday life. In particular, the “promotion of the use of labour-based technologies and community participation...” (ERA 2008b:24) – as formulated in the Road Sector Development Programme – creates different sites for these interactions. As the empirical section of this paper illustrates, local construction of regional and community roads brings a number of different actors into the local arena who act on behalf of the state. On the one hand, the regional roads under scrutiny in this paper were constructed by a state-owned enterprise and its operational unit consisting of road professionals trained for the implementation of labour-based constructions – a dying approach that is increasingly replaced by machine-based constructions in Oromia. These professionals, however, engaged with local people on a contract basis and followed ‘technicist’ (cf. Dessalgen Rahmato 2008b: 339) assumptions underlining the importance of scientific truth and

expert knowledge as a means of efficient road construction and the implementation of the formulated development policies. In the case of the community roads considered, on the other hand, the community involvement was the result of interplaying local government institutions. While the rural road office of the district – employing three road professionals – was not endowed with the capacity required for leading construction and maintenance on the grounds, the community became organised within the *kebeles* and *sub-kebeles*. Although the right “...to participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community” (FDRE 1994) is constitutionally granted, the way local government officials mobilise the community reveals a rather controversial picture. For the sake of the community and the development of the ‘backward’ peasantry, local government officials legitimise coercive and authoritative means to achieve successful mobilisation of rural dwellers. Through decentralisation, the government’s development rhetoric is deeply embedded in the local arena. It provides local administrators with a powerful means of administering the rural population. In sum, the approaches promoted at national level and implemented at local level have led to diverging social logics about the relationship between the peasantry and the rural district.

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Roads, in particular rural roads, play a major role in development. In Ethiopia, where the vast majority of the population depends on agricultural production, this is even more so, and the country's road network has become a major policy issue with significant consequences for the population. An extensive network of 114,397 km of different roads has been constructed, maintained, and classified to date. Although community roads account for nearly two-thirds of the country's total road network, virtually no work deals specifically with issues related to their construction.

In an attempt to address this lack of information, this paper traces the history of the classified road network and of the governmental sector that has been in charge of its construction, in order to shed light on current policies and practices. While regimes and policies have changed, roads have remained important throughout the history of modern Ethiopia, and the road network has continuously grown, outliving its creators. Based on qualitative research methods, the paper provides useful insights about the role of rural roads in the country's development policy, their relation to the process of decentralisation, and their construction at the local level. As such, the findings of this study contribute to a better understanding of state-led development in a decentralised setting, and shed light on the ways development policies collide with local realities.

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